WEEKLY NEWSCLIPS, 4-11-14

Maywood Solar Farm Now Sits on Indianapolis Superfund Site

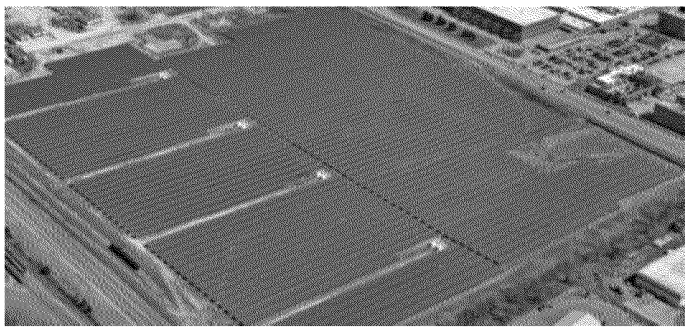
04/09/2014
SustainableBusiness.com News

The first solar farm on an active US Superfund site is now producing energy in Indiana.

After EPA remediated the site - a process that began in 1992 - Hanwha Q CELLS developed the 11 megawatt Maywood Solar Farm. It sits on 43 acres at the Reilly Tar & Chemical Superfund site in Indianapolis.

This is a "significant milestone for the solar industry as a whole in overcoming the legal, financial, regulatory and construction hurdles to create a virtuous cycle, and develop a higher use for brownfield, idle land," says CEO Charles Kim "In completing a non-subsidized Superfund project, Hanwha Q CELLS has broken a barrier that has frustrated solar project developers for more than 20 years."

That's right, the project didn't get any subsidies beyond that offered through Indianapolis Power & Light's feed-in tariff. Indeed, the company completed the project at, or below market cost using conventional financing, while also managing additional site and environmental requirements at a Superfund site.



They came up with a proprietary "Soil Disturbance Minimization Plan" which means they barely disturbed the soil during construction - 93% less than conventional construction approaches.

"This innovative solar project demonstrates that
Superfund sites can be redeveloped, says EPA Regional Administrator Susan Hedman. "The Maywood Solar Farm project has transformed a site with a long history of contamination into a source of renewable energy."

EPA's RE-Powering America's Land Initiative, launched in 2008, identifies contaminated land, landfills and mine sites that would be appropriate for renewable energy. More than 10,000 sites are appropriate for solar, for example, and could cumulatively support 30 times more solar than all currently installed capacity. Over 70 renewable energy projects have so far been built on these lands.

An online Renewable Energy Siting Tool developed by EPA and NREL shows aerial

perspectives and data for roughly 11,000 sites in California alone, highlighting 75 priority sites. Another tool locates sites across the country.

Q-Cells was one of the world premier solar cell manufacturers until it closed its doors because of low-cost competition from Chinese manufacturers. It has since been acquired by Hanwha, a conglomerate based in South Korea.

Blight To Bright: Superfund Site Gets First Ever Utility Scale Solar Farm

Yes, the newly completed Hanwha Q CELLS utility-scale solar farm at a Superfund Site in Indianapolis is the first of its kind and it illustrates a point we've been hammering on for a while now: solar power lets you extract energy and value from already-built-upon sites, even blighted Superfund sites. That's quite a contrast to the current practice of extracting coal by blowing the tops off pristine mountains in rural Appalachia.

This particular Superfund Site, the Reilly Tar & Chemical Corporation Plant, has been undergoing various forms of remediation for more than 20 years. Construction of the solar farm enabled the overall remediation plan to move forward while involving little of the conventional, fuel-sucking process of soil excavation and removal.

The Reilly Tar & Chemical Superfund Site

For those of you new to Superfund, this is an abandoned hazardous site cleanup program and funding program established by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, sparked by the notorious Love

Canal episode among others.

The new law provided an authority framework for the US Environmental Protection Agency to perform site assessment and cleanup, and also to pursue reimbursement from those responsible.

The Reilly Tar & Chemical site is about 120 acres. The complex site required different types of cleanup in different areas including a groundwater extraction system, soil removal and thermal treatment, sludge solidification and capping, soil vapor treatment with concrete capping, and repairs to sewers. All of this work was completed between 1994 and 2010.

Solar Cells On A Superfund Site
The Hanwha Q CELLS solar farm, dubbed the Maywood Solar Farm, is a 10.86 MW operation on 43 acres of the Reilly site.

The solar farm is significant because Hanwha Q CELLS was able to complete the project within budget, despite the added complications of building on a Superfund Site. Here's part of what was involved (breaks added):

Hanwha Q CELLS employed an internally-developed and adaptive construction methodology in concert with US EPA to meet existing site environmental covenants.

The proprietary Hanwha Q CELLS Soil Disturbance Minimization Plan resulted in a volume reduction of site soil movement of more than 93% over conventional construction approaches, while also minimizing the potential for exposing known underground hazards, impairing the existing site environmental remedy, or creating human exposure to site hazards.

Also of significance, Maywood was backed by conventional solar industry financing without government incentives. Aside from Hanwha Q CELLS and EPA, partners in the project include Vertellus Specialties Inc., Indiana Department of Environmental Management, Indiana Power & Light, PNC Bank, August Mack Environmental Consulting, URS Corporation, US Utilities and Solar FlexRack.

Millions Of Acres For Solar Development
To give you an idea of how much the financial success of this project could open the floodgates to Superfund solar farm development, consider that the US EPA has assessed tens of thousands of hazardous sites since 1980.

Working with the National Renewable Energy Laboratory, EPA recently came up with a figure of 14 million for the number of acres in classified sites that have the potential for solar power development.

Keep in mind that these sites are generally cheap to acquire, and they generally enjoy many of the advantages of former industrial sites including proximity to existing transportation routes including road, rail, and water, as well as existing electrical transmission lines and available grid connections.

If this is starting to ring some bells you are probably thinking of the Obama Administration's Re-Powering America's Land initiative. It calls for repurposing Superfund sites and brownfields (derelict industrial sites that involve little or no hazardous materials) for renewable energy generation, including wind as well as solar.

The initiative also doubles as a redevelopment program and green jobs generator for blighted areas.

To ice the cake, EPA is also pursuing solar-powered remediation at classified sites.

Read more at http://cleantechnica.com/2014/04/10/blight-bright-superfund-site-gets-first-ever-utility-scale-solar-farm/#uwJKyZE39QrFSlwx.99

News Headline: Deal reached to clean up Chicago-area radioactive waste |

Outlet Full Name: Chicago Tribune - Online
News Text: The nation's biggest settlement for environmental contamination sets aside $121 million for Chicago and $9 million for West Chicago Every time developers dig up a patch of Chicago's Streeterville neighborhood to build hotels or high-rise condominiums, the soil must be tested for radioactive thorium dumped years ago at several sites near the Chicago River.

Tons of contaminated soil have been removed in recent years as the neighborhood undergoes a rapid transformation from its industrial past. Now the city and the federal government have a new source of funding to ensure taxpayers aren't stuck with the bill.

A $5.15 billion legal settlement announced this week by the Justice Department and Environmental Protection Agency includes about $121 million for thorium removal work in Streeterville and $9 million to help finish the cleanup of contaminated sites in suburban West Chicago.

The radioactive waste was dumped decades ago by the Lindsey Light and Chemical Co., which used thorium to produce gas lantern mantels at a long-forgotten Chicago factory. The company moved to West Chicago in the 1930s, changed hands several times and ended up as part of Kerr-McGee Corp., which was cited last year by a federal bankruptcy judge for fraudulently shifting its massive environmental liabilities to a separate company.

The current parent company of Kerr-McGee, Anadarko Petroleum Corp.,

agreed to pay the nation's largest settlement for environmental contamination to address the two Chicago-area sites and dozens of others nationwide. Some of the money will be used to reimburse federal, state and local agencies that collectively have spent billions cleaning up the waste.

"This is a very, very significant case," said Susan Hedman, the EPA's regional administrator. "The EPA and Justice Department were very focused to ensure the principle that the polluter pays was upheld in court."

Money to be set aside for Chicago includes $67 million to address thorium contamination as it is discovered in Streeterville and an additional $45 million to remove radioactive waste found during street work.

The Chicago Park District will get about $6.7 million to finish the cleanup of a tainted site where the Chicago River meets Lake Michigan. City planners want to turn the 3.5-acre site into a park dedicated to Jean Baptiste Point du Sable, the city's first non-native settler.

Nearly $750 million has been spent cleaning up thorium contamination in West Chicago, according to the EPA. Earlier legal settlements helped fund much of that work.

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News Headline: Crews finish cleanup of BP oil spill on Lake Michigan, trace amounts of oil remain |

Outlet Full Name: MLive.com
News Text: Angie Jackson | ajackso3@mlive.com By Angie Jackson | ajackso3@mlive.com

on April 04, 2014 at 7:43 PM, updated April 04, 2014 at 7:44 PM

WHITING, IND. – An assessment team that formed in response to last week's

oil spill on Lake Michigan in Indiana has determined that no further cleanup efforts are needed.

Crews determined that trace amounts of oil remain along the rocky shoreline of BP's refinery in Whiting following the March 24 spill. Up to 1,638 gallons of oil were discharged when a distillation unit malfunctioned, officials said.

U.S. Coast Guard Petty Officer 1st Class Jeremy Thomas said aggressive cleanup methods, such as pressure washing, to remove the remaining oil would do more harm than good to the environment.

The remaining oil along the rocky wall on either side of a cove-like area, where the oil was believed to be contained to, has formed to asphalt and become part of the rock, Thomas said. It doesn't pose a threat to the environment or wildlife, he said.

"It's not in an area where they're nesting or spending time," Thomas said. "It's away from where it would cause an impact."

Crews on Sunday, March 30, found and later removed oiled pebbles on the rocky shoreline. Underwater surveys of 36 locations on the bottom of Lake Michigan did not show any indication of oil.

"The beach itself, we had no visible oil anywhere," Thomas said.

One boom remains at the refinery's cooling water outfall, where the discharge occurred. An oil sheen remains in a tank in the area, but is solely confined to a separator and blocked from entering the outfall, Thomas said. BP will follow up with Coast Guard and Environmental Protection Agency assessment team when the oil is removed from the holding tank. The boom will then be removed.

The spill site spans about a half-mile industrial stretch of shoreline between a wastewater plant and steel mill. Officials said there were no indications that drinking water was threatened. The Lake County surveyor, whose officer oversees stormwater drainage, has required that BP provide data from the spill and copies of investigations, the Times of Northwest Indiana reported Wednesday.

A Michigan Department of Environmental Quality spokesperson last week said the spill wasn't impacting Michigan's beaches.

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Angie Jackson covers public safety and breaking news for MLive/The Grand Rapids Press. Email her at ajackso3@mlive.com, and follow her on .

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News Headline: Group to meet with EPA consultant on barrel fill |

Outlet Full Name: Springfield News-Sun - Online
News Text: A grassroots group battling the proposed clean-up plan at the Tremont City Barrel Fill site will meet with a federal consultant at 7 p.m. Wednesday at the city hall forum, 76 E. High St.

Joseph McMahon of Denver-based Collaborative Processes, Inc., has been hired to serve as a third-party consultant between the United States Environmental Protection Agency and local stakeholders concerning the barrel fill's clean-up plan. The goal is to "improve communication and ensure that various viewpoints are heard and understood," according to Josh Singer, a spokesperson for the U.S. EPA Region 5.

McMahon is expected to make recommendations to the U.S. EPA "regarding community outreach." The U.S. EPA will spend approximately $20,000 in public money on McMahon's services, according to Singer.

All local agencies want the barrels removed from the site, but the U.S. EPA has proposed a different clean-up plan: Dig up the barrels, add a liner and put them back in place.

McMahon will be meeting with other local stakeholders, including the Ohio EPA and township officials, and will try to help improve communications about the site, according to the U.S. EPA. McMahon will also be meeting with potential responsible parties, according to Marilyn Welker, the president of People For Safe Water.

The agency will likely plan and schedule community meetings after receiving feedback from the consultant, Singer said.

Local officials have worked for years to change the proposed clean-up plan at the Tremont City Barrel Fill, an 8.5-acre section of a closed landfill for industrial waste barrels that contains approximately 1.5-million gallons of hazardous waste. Leaders and the citizen's group believe the barrels are leaking from the site, which sits near the area's sole source aquifer.

Rainwater draining through the barrels could eventually contaminate the county's drinking water and pose a risk to public health decades from now, officials said.

The forum will allow People For Safe Water to underscore its message: The current clean-up plan is unacceptable.

“We know that there is a desire to create a collaborative process,” Welker said. “We want to make it very clear that if we put the safety and the purity of our water supply at the center of this, this is not a situation of compromise and collaboration, given where we are.

“The plan that's currently on the table has so compromised what we think are safe clean-up procedures.”

In 2010, area leaders believed the U.S. EPA would adopt the $56 million plan, Alternative 4a, which would remove all waste from the site. However, in 2011, the U.S. EPA issued its current final decision, Alternative 9a, which will cost approximately $28 million. The barrels will be dug up and then reburied on-site in a lined landfill.

Three years later, officials are still hoping to have the plan reversed. In November of 2012, city and county leaders hand-delivered a letter to one of President Barack Obama's aides during a campaign stop in November of 2012. They are still waiting on a response from the executive branch.

The site is currently being prepared for a proposal to the Superfund National Priorities List, which could take up to a year, according to Welker. Last year, the EPA took samples of surface water, sediment and soil around the barrel fill site as part of the proposal. The results have been returned, but a final report is pending, Singer said in an e-mail.

If the site is eligible, it could be proposed at an upcoming rulemaking meeting later this year, Singer said.

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http://www.kokomotribune.com/local/x1445031370/Soccer-complex-held-up-by-lack-of-grass/print

Kokomo Tribune; Kokomo, Indiana

April 8, 2014

Soccer complex held up by lack of grass

Growing turf on the old acid lagoon area has been a struggle

By Scott Smith Kokomo Tribune
Kokomo Tribune

---- — Getting grass to grow on the city’s biggest environmental cleanup site has been a struggle.

It's been two-and-a-half years since plans were announced for a new soccer complex along West Markland Avenue, but there's still no established turf, and the Kokomo Soccer Club has yet to paint a line or kick a ball on the 60-acre site.

Anyone walking out onto the site now will come back with mud-caked shoes. The grass grows in furrows, with plenty of bare dirt in between.

Even when it hasn't rained for days, geese are constantly out on the site, lounging around marshy areas where water won't drain. Most of the site is in a floodplain.

When the soccer complex plans were announced in 2011, U.S. Environmental Protection Agency officials announced they were planting grass seed suitable for recreational fields on the site, and city and Kokomo Soccer Club officials said kids would be playing there by August of 2012.

But 2012 was a drought year, and the grass never got established. Then 2013's spring came and went without much improvement.

Last fall, city workers reseeded, aerated and fertilized the area in hopes of better results this spring. The hope, once again, is that the site will be ready for the fall soccer season.

Club president Amy Pitzer said this spring may decide whether the club maintains its commitment to a problem-plagued site, or whether it'll seek a different area for expansion.

"It's just now starting to get some sunshine, so over the next month, it's going to be telling, if we'll invest more time and money into it," Pitzer said.

Back in October 2011, there was considerable excitement about the site, which sits at Berkley Road and Markland Avenue, just west of the city's wastewater treatment plant.

City, state and federal officials gathered on what was once part of the former Continental Steel property to announce that part of the environmental brownfield site would be repurposed into soccer fields.

But there were obvious problems, including the fact that, at the time, the city didn't own the land.

The area has no irrigation and it's unclear whether the U.S. Environmental Protection Agency will allow the soil cap — which separates the public from the environmental hazards buried beneath — to be disturbed for subsoil drainage.

Then there's the soil itself, which still hasn't produced enough grass to cover the site.

When the EPA hired Bowyer Excavating, Peru, to install the soil cap, the bid specifications called for topsoil to be part of the 24-inch thick layer.

Instead of actual topsoil, however, Bowyer was allowed to install a 24-inch layer of clay-heavy fill dirt, with some peat moss tilled in.

EPA officials said they allowed the peat moss "due to the difficulty of obtaining enough topsoil for an area so large," and said the peat/soil mixture met the EPA's definition of topsoil.

The bid specs called for "natural, friable, sandy loam" from a well-drained area. An amendment to the definition indicated the requirement could be met by "incorporating

sand, peat, manure, or sawdust" to produce the required composition.

The tilled peat moss method was also used for the other areas of the Continental Steel site under a soil cap, including the area where the Main Plant sat and the area around the former Markland Avenue Quarry.

Moving ahead

Even though the EPA didn't require actual topsoil to be used on the site, city officials aren't blaming the feds.

That's because the soil cap was finished by August 2011, and the city didn't come out with plans for the soccer complex until October 2011.

Kokomo city engineer Carey Stranahan said the city has been trying to remediate some of the soil problems and said the city is committed to the project.

"We're going to make it work," Stranahan said. "In no way do we think the EPA wasn't doing a good job."

This spring, city workers will finish the parking lot for the fields and will begin building a concession stand for the club. EPA officials said they are looking in to whether the agency can help the city explore options to improve grass growth as part of the ongoing maintenance activities at the site.

Club officials, meanwhile, are pursuing grant funding to help offset the cost of the project, and Pitzer said she wants to try to start using the site this fall, even if only one or two fields can be established.

The club needs the space. For years, teams have been practicing at various fields around Kokomo in an attempt to lessen wear and tear on their main fields at the corner of Defenbaugh Street and Berkley Road.

Club officials will match grant funding from the Indiana Tourism Board to build the concession stand, which will sit to one side of the capped area. Because the cap can't be disturbed, building footers can't be installed within the capped area.

The concession stand is a key component of the complex and a necessary feature if the soccer club one day hosts a tournament at the site.

"I know it sounds silly, but having flushable toilets is a huge deal when you're trying to have tournaments," Pitzer said.

Club officials are also discussing how they can help to improve the grounds, she added.

"We're making a commitment as a club, but we're probably going to have to get some help to make it work," she said.

No grass for a long time

When Continental Steel was operating, the steel mill would pump spent acid — known as "pickle liquor — into 10-acre drying beds.

As part of the plant cleanup, the area which contained the drying beds, also known as acid lagoons, was capped.

If the city can get some grass to grow, the soccer fields would sit directly above the old

acid lagoons.

Grass hasn't grown on the site for a long, long time.

The drying beds were used as a way to allow oxidized metals to precipitate out of the spent acid. Once some of the metal had dropped out of the pickle liquor, the remaining liquid could be pumped to an onsite wastewater treatment plant, where it could be further neutralized and cleaned before being released into the Wildcat Creek.

But the process left decades' worth of oxidized metal precipitate caked at the bottom of the drying beds.

The plant closed for good in 1986, and 25 years later, as the EPA readied the site for capping in 2011, grass had not taken root on the rust-colored crust of the drying beds.

Remediating the site has cost the federal government about $8.5 million, according to EPA project manager Nabil Fayoumi. The cleanup was part of a 12-year effort which has cost close to $40 million. All but $5.1 million of that total, which was paid by the state of Indiana, came from federal funds.

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